

STAROSTIN, V. Kh

USSR/Form Animals. Horses

Q-2

Abs Jour : Ref Zhur - Biol., No 11, 1958, No 49958

Author : Starostin, V. Kh.  
Inst : Lithuanian Scientific Research Institute for Animal Husbandry and Veterinary Sciences.  
Title : Anatomic Investigations and the Process of Filling-in of Venous Vessels of the Thoracic Extremities in Horses.

Orig Pub : Byul. nauchno-tekhn. inform. Lit. n.-i. in-t zhivotnovodstva i veterinarii, 1957, No 2, 41-42

Abstract : A short description of 2 methods for filling venous vessels is given. A water suspension of barium sulfate injected into the vein was used as a contrast by the first method. The 2nd method consisted in injecting a 4-5 percent sulphurous solution into the artery, and then a 4-5 percent solution of lead acetate into the same artery. This resulted in dark-colored phosphorus lead being forced in the vessels. Instructions are provided with regard to the techniques which may be employed in order to study the injected vessels.

Card : 1/1

STAROSTIN, V M.

PHASE I BOOK EXPLOITATION

SOV/435<sup>4</sup>

Shorin, Aleksey Ivanovich, and Vasiliy Mikhaylovich Starostin

Proizvodstvo spiral'nogo metallorezhushchego instrumenta metodom  
skruchivaniya dvukh metallov (The Manufacture of Helical  
Metal-Cutting Tools by Twisting Two Metals [Together] Moscow,  
Mashgiz, 1960. 54 p. 4,500 copies printed.

Reviewer: G. V. Podgurskiy; Managing Ed. for Literature on Metal-  
working and Toolmaking: V. V. Rzhavinskiy, Engineer; Ed. of  
Publishing House: G. I. Baydakov; Tech. Ed.: G. V. Smirnova.

PURPOSE: This brochure is intended for designers and process  
engineers in toolmaking and machine-building plants.

COVERAGE: Practical experience gained in the design and produc-  
tion of helical metal-cutting tools (face-milling cutters,  
end-milling cutters, arbor-type reamers, and others) by hot  
twisting of two different metals is discussed. This method  
was developed and applied by the Kolomenskiy teplovozostroitel'-  
nyy zavod im. Kuybysheva (Kolomna Diesel-Locomotive-Building

Card 1/4

The Manufacture of Helical (Cont.)

SOV/4354

Plant imeni Kuybyshev). This new technological process differs considerably from the commonly used processes and may be used in mass production of metal-cutting helical tools. Methods and sample designs for blanks, as well as the characteristic features of machining and heat treatment, are explained and compared with the methods used presently in helical toolmaking. No personalities are mentioned. There are 8 references, all Soviet.

## TABLE OF CONTENTS:

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Ch. I. Design and Construction of Helical Tools Made by the Twisting Method	7
1. [Basic] dimensions of tool types	7
2. General technical requirements in tool construction	8
3. Materials used in helical toolmaking by the twisting method	11
4. Types of blanks for making helical tools by the twisting method	11

Card 2/4

L 6368-66 EWT(1)/EWA(h)

ACC NR: AP5026755

SOURCE CODE: UR/0286/65/000/017/0028/0029

AUTHOR: Starostin, V. M.; Repnev, A. N.

ORG: none

TITLE: A waveguide switch. Class 21, No. 174235

SOURCE: Byulleten' izobreteniy i tovarnykh znakov, no. 17, 1965, 28-29

TOPIC TAGS: waveguide, waveguide coupler, switching circuit, electronic commutator

ABSTRACT: This Author's Certificate introduces a waveguide switch which contains a housing with input ports for connecting the unit to waveguide channels to be switched. The device also includes a spring-return commutating element and a drive motor for transposition of the commutating element in a direction perpendicular to the plane of the channels being switched. The degree of decoupling between the channels is increased and the working frequency range of the switch is expanded by making the commutating element in the form of a metal cylinder with curved waveguide sections placed one over the other for interconnection of the waveguide channels.

UDC: 621.395.658

Card 1/2

09020150

L 6368-66

ACC NR: AP5026755

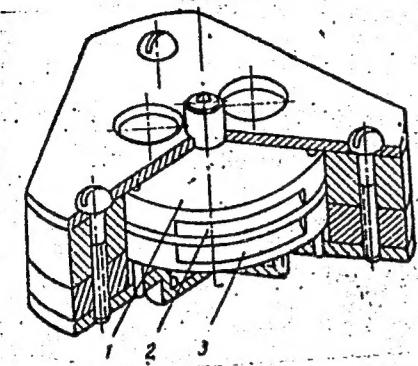


Fig. 1. 1--commutating element; 2 and 3--  
---waveguide sections

SUB CODE: EC/ SUBM DATE: 01Aug64/ ORIG REF: 000/ OTH REF: 000

nw  
Card 2/2

STAROSTIN, V.N.

Unification and standardization of fuel equipment. Standartizatsiia  
25 no. 5:17-19 My '61. (MIRA 14:5)  
(Gas and oil engines—Fuel systems—Standards)

STAROSTIN, V.N.

Flaws in the power plant of the motorship "Ingur." Biul. tekhn.-  
ekon.inform. Tekh. upr. Min. mor. flota 7 no.5:54-57 '62.  
(MIRA 16:3)

1. Starshiy mekhanik teplokhoda "Ingur".  
(Marine engines—Fuel systems)

STAROSTIN, V.N.

Standardization of fuel systems. Standartizatsiia 26 no.5:28-29 My '62.  
(MIRA 15:7)

(Gas and oil engines—Fuel systems)

STAROSTIN, V.P.

Coordinator of movements for teaching students to work with a  
fret saw. Politekh.obuch. no.10:38-41 0 '59. (MIRA 13:2)

1. Shkola-internat No.1, Krasnodar.  
(Carpentry--Study and teaching)

STAROSTIN, V.V.

Automatic lines for continuous centerless grinding of parts.  
Avt.prom. 28 no.11:39-41 N '62. (MIRA 16:1)

1. Ural'skiy avtozavod.

(Grinding machines)

ACCESSION NR: AP4041853

S/0139/64/000/003/0134/0139

AUTHORS: Shalimova, K. V.; Travina, T. S.; Potapov, Yu. V.; Starostin, V. V.

TITLE: Electric properties of polycrystalline cadmium sulfide films

SOURCE: IVUZ. Fizika, no. 3, 1964, 134-139

TOPIC TAGS: cadmium sulfide, thin film, sublimated film, carrier density, carrier mobility, Hall effect, electric conductivity

ABSTRACT: The purpose of the research was to study and to learn to control the electric properties of sputtered layers of cadmium sulfide. The thin polycrystalline films were obtained by evaporating nonluminescent cadmium-sulfide powder in vacuum ( $10^5$ -- $10^{-6}$  mm Hg) and also in spectrally pure argon and hydrogen sulfide (0.5--1 mm Hg). The substrate was insulating and its temperature could be varied and controlled. The evaporator of the initial material could also be

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ACCESSION NR: AP4041853

varied from 500 to 1100°C. The electric conductivity and the Hall effect in these film specimens were investigated as functions of the sublimation temperature of the initial substance, and also of the medium in which the films were sputtered, and the substrate temperature at the instant of condensation of the semiconductor layer on the substrate. Data are given on the electric conductivity of these layers as functions of the medium, sputtering of the initial powder, its sublimation temperature, heating of the substrate on which the specimen is deposited, and the thickness of the sample. The Hall-effect measurements of cadmium-sulfide films obtained under different technological conditions are used to calculate the mobility and density of the carriers. A connection is established between the mobility and the density or thickness of the layer. The experimental and theoretical data are compared. It is concluded that at the instant when the sulfide layer is sputtered, excess cadmium atoms penetrate into it, and these determine the dark conductivity of the sample, along with exerting an influence on the scattering of

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ACCESSION NR: AP4041853

the carriers. There is no rigorous theory of carrier scattering in thin semiconductor layers but approximate calculations show that the scattering on the surface of the layer and on the boundaries between individual crystallites can greatly reduce the mobility. This distinguishes the produced films from single crystals of cadmium sulfide and probably explains the dependence of the electric conductivity on the layer thickness. Orig. art. has: 5 figures.

ASSOCIATION: None

SUBMITTED: 00

ENCL: 03

SUB CODE: 88

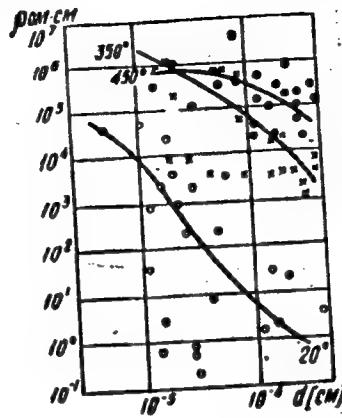
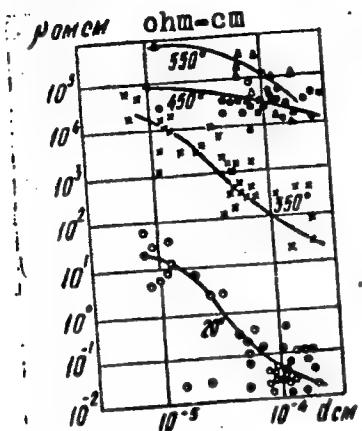
NR REF SOV: 002

OTHER: 007

Card 3/6

ENCLOSURE: 01

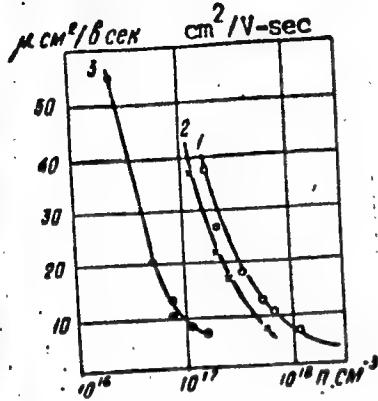
ACCESSION NR: AP4041853



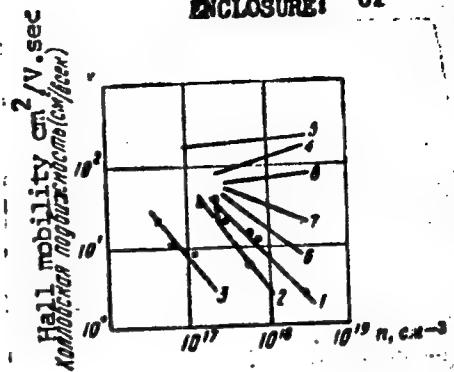
Dependence of resistivity on the thickness of cadmium sulfide films obtained in the following manner: left - by sputtering the initial powder in an argon atmosphere on substrates heated to 20, 350, 450, and 550°C. Right - by sputtering in a hydrogen sulfide atmosphere on specially heated substrates, and also on substrates heated to 350 and 450C

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ACCESSION NR: AP4041853



ENCLOSURE: 02

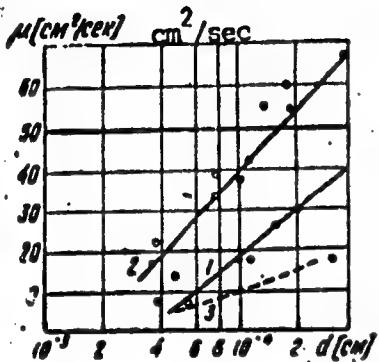


Dependence of carrier mobility on their density in cadmium sulfide. Left - obtained by vacuum sputtering and having different resistivities. Right - 1, 2, 3 - experimental data on films, 4, 5 - data on single crystals obtained elsewhere, 6, 7, 8 - theoretical curves for several densities.

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ACCESSION NR: AP4041853

ENCLOSURE: 03



Dependence of carrier mobility in cadmium sulfide films on their thickness. 1 - films sputtered in vacuum on heated substrates (180°C); carrier density  $2.3 \times 10^{17} \text{ cm}^{-3}$ . 2 - films sputtered in argon atmosphere on substrates heated to 260°C; carrier density  $2.6 \times 10^{18} \text{ cm}^{-3}$ . 3 - theoretical dependence of carrier mobility on sample thickness.

Card 6/6

STAROSTIN, V. V.

Complex compounds with anions of aromatic sulfonic acids in the outer sphere. V. P. Yatsimirskii, K. E. Prik, E. P. Skvirskaya, and ~~V. V.~~ Starostin (Chem.-Technol. Inst., Ivanovsk). Zair. Otechestv. Khim. (J. Gen. Chem.) 21, 436-90 (1951).—Mixing 1% solns. of aromatic sulfonates (Na salts) with std. eq. solns. of  $[\text{Co}(\text{NH}_3)_6]\text{Cl}_3$  (I),  $[\text{Cr}(\text{NH}_3)_6](\text{NO}_3)_3$  (II), or  $[\text{Cr}(\text{CON}_2\text{H}_4)_6]\text{Cl}_3$  (III) usually gave ppts. of the corresponding complex salts. 2-Me<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>-SO<sub>3</sub>Na gave with I and III ppts. having compns. of the type  $[\text{Co}(\text{NH}_3)_6](\text{C}_9\text{H}_{10}\text{SO}_3)_3$ . The solv. of the Co salt is 0.0037 mole/l. at 20°. Na sulfonilate does not give ppts. 2,4-ClMeC<sub>6</sub>H<sub>3</sub>SO<sub>4</sub>Na gives ppts. with I, II, and III;  $[\text{Co}(\text{NH}_3)_6]-(\text{C}_7\text{H}_6\text{ClSO}_3)_3$ , yellow;  $[\text{Cr}(\text{CON}_2\text{H}_4)_6](\text{C}_7\text{H}_6\text{ClSO}_3)_3$ , green. The 2-nitro analog gives ppts. with I, II, and III;  $[\text{Co}(\text{NH}_3)_6]-(\text{C}_7\text{H}_8\text{NSO}_5)_3$ , yellow;  $[\text{Cr}(\text{NH}_3)_6](\text{C}_7\text{H}_6\text{NSO}_5)_3$ , yellow, solv. 0.0087 mole/l. at 40°;  $[\text{Cr}(\text{CON}_2\text{H}_4)_6](\text{C}_7\text{H}_6\text{NSO}_5)_3$ , green, solv. 0.0033 mole/l. at 20°. The 2-Chloro-5-nitro analog also gives ppts. with I, II, and III;  $[\text{Cr}(\text{NH}_3)_6](\text{C}_7\text{H}_5\text{ClNSO}_5)_3$ , yellow;  $[\text{Cr}(\text{CON}_2\text{H}_4)_6](\text{C}_7\text{H}_5\text{ClNSO}_5)_3$ , green. Na 3-carbazolesulfonate gives ppts. even in rather dil. solns. with I, II, and III. Even less sol. are the salts of 6-nitro-3-carbazolesulfuric acid;  $[\text{Co}(\text{NH}_3)_6](\text{C}_{12}\text{H}_6\text{N}_2\text{SO}_5)_3$ , yellow;  $[\text{Cr}(\text{CON}_2\text{H}_4)_6](\text{C}_{12}\text{H}_6\text{N}_2\text{SO}_5)_3$ , yellow; poorly sol. salts also form with derivs. of Cu, Zn, Ni, and Cd. Especially poorly sol. are salts of alizarinsulfonates; salts with I and II are especially mentioned but are not further characterized. Generally, the solv. declines with increased size of the anion and with introduction of polar groups into it. Introduction of OH, NH<sub>2</sub>, or CO<sub>2</sub>H groups into the sulfonate radical sharply raises the solv. of the complex.

Starostin, V. V.

*Absorption of nitric oxide by aqueous solutions of ferrous salts. G. D. Sirokin and V. V. Starostin, J. Appl. Chem. U.S.S.R. 27, 1081 (1954) (Engl. translation).—See C.I. 49, 7934i.*

B. M. R.

## U S S R .

Absorption of nitric oxide by aqueous solutions of ferrous salts. G. D. Sirotkin and V. V. Starastin (Chemi.-Technol. Inst., Ivanovo). *Zhur. Priklad. Khim.* 27, 1141-4 (1954). — Absorption of NO in 0.9% solns. of  $\text{FeSO}_4$  and  $\text{FeCl}_2$  was detd. and the equil. const.  $K = V/(32.4 - V)^2$  was calcd.; 1 = liters of NO absorbed by 1 mol. of  $\text{Fe}^{++}$ . Max. absorption was obtained at 10° and  $P_{\text{NO}} = 1 \text{ atm}$ ; at 50° the complex  $[\text{FeNO}]_2$  is unstable and absorption was low. Absorption was independent of the concn. of  $\text{FeCl}_2$  and decreased with increasing concns. (6.216 and 0.818 M) of  $\text{FeSO}_4$ . The calcd. values of the heat and entropy of absorption are: -11 kcal./mol. NO and -37.7 e.u., resp. J. Bencowitz

STAROSTIN, V.V.

Determination of ethylenediaminetetraacetic acid in solutions of  
metal complexonates. Zhur.anal.khim. 16 no.5: 20-622 S-0 '61.  
(MIRA 14:9)  
(Acetic acid) (Complexons)

45460  
S/078/63/008/003/009/020  
B117/B186

11/22/21

AUTHORS: Starostin, V. V., Spitsyn, Vikt. I., Silina, G. F.

TITLE: Complexes between beryllium and ethylene diamine  
tetraacetic acid

PERIODICAL: Zhurnal neorganicheskoy khimii, v. 8, no. 3, 1963, 660-662

TEXT: The solubility of beryllium hydroxide in the presence of the ammonium salt of EDTA,  $H_4Y$ , was studied at  $20^{\circ}\text{C}$  for different pH values and complexon concentrations. The solubility was found to depend linearly on EDTA concentration for all pH values investigated. This was explained in terms of the formation of the beryllium complex  $\text{BeY}^{2-}$  (pH 7-7.5) and the beryllium hydroxycomplex  $\text{BeOHY}^{3-}$  (pH > 7.5). The Be concentration decreased with increasing pH due to destruction of complexes and precipitation of  $\text{Be}(\text{OH})_2$ . The instability constants of the complexes were calculated from experimental data: at  $20^{\circ}\text{C}$  and  $\mu \approx 0.3$ ,  $\text{pK}_{\text{BeY}}^{2-} = 10.2$ , and  $\text{pK}_{\text{BeOHY}}^{3-} = 5.4$ . The beryllium complex has

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SHALIMOVA, K.V.; TRAVINA, T.S.; POTAPOV, Yu.V.; STAROSTIN, V.V.

Electric properties of polycrystalline cadmium sulfide  
films. Izv. vys. ucheb. zav.; fiz. no. 3:134-139 '64.  
(MIRA 17:9)

*STAROSTIN, Ye. A.*

STAROSTIN, Ye.A.

Spring wheat in the Far East. Vop.geog.Dal'.Vost. no.3:3-29 '57.  
(MIRA 10:12)

(Soviet Far East--Wheat)

SIMONENKO, M.V.; BELOUSOV, N.N.; STAROSTIN, Ye.A.; TAV'YEVA, S.M.

Aluminum alloys instead of bronze in gas plug cocks. Gaz. prom.  
6 no. 1:27-31 '61. (MIRA 14:1)  
(Gas distribution)

ZOLOTNITSKIY, Vsevolod Aleksandrovich, kand. sel'khoz. nauk,  
laureat Gosudarstvennoy premii; STAROSTIN, Ye.A., kand.  
sel'khoz. nauk, red.; MARKOVA, S.M., red.; KAYDALOVA,  
M.D., tekhn. red.

[Soybean in the Far East] Soia na Dal'nem Vostoke. Pod  
red. E.A. Starostina. Khabarovsk, Khabarovskoe knizhnoe izd-  
vo, 1962. 246 p. (MIRA 16:6)  
(Soviet Far East--Soybean)

SOROKIN, Aleksey Ivanovich; GROZOV, Nikolay Vasil'yevich; STEPANOV, Aleksandr Makarovich; STAROSTIN, Yevgeniy Il'ich; CHERNYAK, Lev Mikhaylovich; BOKSERMAN, Yu.I., red.; SVIATITSKAYA, K.P., ved. red.; YAKOVLEVA, Z.I., tekhn. red.

[Liquefied gases in England; their transportation, storage, uses] Szhizhennye gazy v Anglii; transport, khranenie, ispol'zovanie. Moskva, Gostoptekhizdat, 1963. 140 p.  
(MIRA 16:10)

(Great Britain--Liquefied petroleum gas)

STAROSTIN, Yu. N.

AID Nr. 975-5 23 May

RADIO SOUNDING OF PLASMA MOVING AGAINST ELECTRODYNAMIC  
ACCELERATION IN A COAXIAL ACCELERATOR (USSR)

Brodskiy, V. B., Ye. M. Belitskiy, A. T. Voronchev, N. V. Konyakhin,  
and Yu. N. Starostin. Zhurnal tekhnicheskoy fiziki, v. 33, no. 4, 1963, ...  
426-...3. [REDACTED]

S/057/63/033/004/010/021

The relationship existing in a plasma between number of charged particles ejected both in and against the direction of electrodynamic acceleration has been evaluated to analyze processes occurring in a coaxial accelerator. A method is described for using two different wavelengths ( $\lambda_1 = 0.8$  cm and  $\lambda_2 = 3$  cm) simultaneously, by which the relationship between these quantities can be obtained. It was found that a plasmoid with a concentration of at least  $n_1 > 10^{13}$  electrons/cm<sup>3</sup> was moving in the direction of electrodynamic acceleration. The time it took for the plasmoid to cross the beam was

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STAROSTIN, Yu.S.

Seminar on pipe drawing on a self-adjusting mandrel. TSvet.  
met. 36 no.10:84-85 0 '63. (MIRA 16:12)

STAROSTIN, Yu. S., MOLODCHININ, E. V., and SIMONOV, L. L.

"Determination of optimum and maximum drawings during drawing of pipes from aluminum alloys on self-aligning mandrels" - showed that adhering to this method is 1.5--2.0 times greater than pressing during drawing on cylindrical mounting. This allows intensification of the process of drawing.

Report presented at the branch seminar on drawing of tube and aluminum alloys on self-aligning mandrels, Metallurgical Factory im V. I. Lenin, Kuybyshev,  
24-28 June 1963

(Tsvet. Metally, No. 10, 1963 pp 84-85, author Starostin, Yu. S.  
JPRS 24,651 19 May 1964

L 3629-66 EWT(d)/EWT(1) IJP(c) GW

ACCESSION NR: AT5023297

UR/2547/65/000/157/0047/0057

528.21:531.26

33

30

0

AUTHOR: Yurkina, M. I.; Starostina, A. B.

44,55

44,55

TITLE: Model testing of the principle of numerical integration for computations based on the Molodenskiy integral equation for the disturbing potential

16,44,65

SOURCE: Moscow. Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aeros"yemki i kartografii. Trudy, no. 157, 1965. Issledovaniya po geodezicheskoy gravimetrii (Research on geodetic gravimetry), 47-57

TOPIC TAGS: geodetic gravimetry, disturbing potential, Molodenskiy equation, integral equation 13,44,55 13,44,55

ABSTRACT: The principle of numerical integration using the Molodenskiy integral equation for the disturbing potential has been tested on a terrestrial model in the form of a cone situated on a reference surface. [See AT5023296, ATD Press v. 4, no. 106, 22 Nov 1965, 7-9.] In the present study, the model was changed slightly by superimposing on the main cone a truncated cone in which the center of the upper surface coincided with the apex of the main cone. Computations were made for the value of the disturbing potential at the vertex of the cone. The surface of the

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L 3629-66

ACCESSION NR: AT5023297

3

cone was approximately represented by plane sides in two versions, the first for large areas and the second for small areas. Tabulated results show that the latter version is more accurate. Orig. art. has: 18 formulas, 2 figures, and 1 table. [ER]

ASSOCIATION: Tsentral'nyy nauchno-issledovatel'skiy institut geodezii, aeros"yemki i kartografii (Central Scientific Research Institute of Geodesy, Aerial Surveying, and Cartography)

44,55

SUBMITTED: 00

ENCL: 00

SUB CODE: ES

NO REF SOV: 000

OTHER: 000

ATD PRESS: 4114

BVR  
Card 2/2

KLYUCHNIK, N.S.; STAROSTINA, A.V.

Nonsynanthropic species of rodents in Leningrad. Zool. zhur. 42  
no.10:1554-1561 '63. (MIRA 16:12)

1. Anti-Plague Port and Urban Observation Station of Leningrad.

KLIMOVA, T.K.; LEVACHEV, I.A.; STAROSTINA, A.V.; VITEZEEVA, K.A.

Some data on tularemia in Archangel Province. Zhur. mikrobiol.,  
epid. i immun. 40 no.6:48-54 Je '63. (MIRA 17:6)

1. Iz Leningradskoy protivochumnoy portovoy i gorodskoy  
nablyudatel'noy stantsii.

TARARIN, R.A.; STAROSTINA, A.V.

Effect of aerosols in disinestation of enzootic foci; an  
abstract. Med. paraz. i paraz. bol. 33 no.5:616-617 S-0 '64.  
(MIRA 18:4)  
1. Vozvanno -mističeskaya ordena Lenina akademiya imeni Kirova,  
Leningrad i Leningradskaya protivochumnaya nablyudatel'naya  
stantsiya.

STAROSTINA, G.S., metodist

Innovations in printing equipment in the U.S.S.R. Inform.  
biul. VDNKH no.7:38-39 Jl '63. (MIRA 16:8)

1. Pavil'on "Sovetskaya kniga" na Vystavke dostizheniy  
narodnogo khozyaystva.

SHAPIRO, S.Ye.; KONSTANTINOV, A.A.; ZELENSKAYA, M.I.; CHAPOVSKAYA, L.G.;  
STAROSTINA, I.S.

Clinical and immunobiochemical parallels in typhoid-paratyphoid patients. Report No. 1: Effect of the severity of the course, the type of pathogen and the age factor on the protein composition of the blood serum of typhoid-paratyphoid patients. Trudy Khab.med. inst. no.20:38-42 '60. (MIRA 15:10)

1. Iz kliniki infektsionnykh bolezney (zav. dotsent S.Ye.Shapiro) Khabarovskogo meditsinskogo instituta i biokhimicheskoy laboratorii (zav. dotsent A.A.Konstantinov) Khabarovskogo nauchno-issledovatel'skogo instituta epidemiologii i gigiyeny (dir. A.M.Krupnikova). (BLOOD PROTEINS) (TYPHOID FEVER) (PARATYPHOID FEVER)

KONSTANTINOV, A.A.; SHAPIRO, S.Ye.; STAROSTINA, I.S.; CHAPOVSKAYA, L.G.; ZELENSKAYA, M.I.

Clinical and immunobiochemical parallels in typhoid-paratyphoid patients. Report No. 2: Effect of antibiotic therapy on the protein composition of the blood serum and Widal's reaction; the interrelation between Widal's reaction and the individual blood serum protein fractions. Trudy Khab.med.inst. no.20:43-48 '60.

(MIRA 15:10)

1. Iz kliniki infektsionnykh bolezney (zav. dotsent S.Ye.Shapiro) Khabarovskogo meditsinskogo instituta i biokhimicheskoy laboratorii (zav. dotsent A.A.Konstantinov) Khabarovskogo nauchno-issledovatel'skogo instituta epidemiologii i gigiyeny (dir. A.M.Krupnikova).  
(BLOOD PROTEINS) (ANTIBIOTICS) (TYPHOID FEVER)

KONSTANTINOV, A.A.; STAROSTINA, I.S.; SHMAKOTINA, Z.V.

Aldolase and transaminase activity of the blood serum and urine  
in some diseases. Vop. med. khim. 7 no.5:485-487 S-0 '61;  
(MIRA 14:10)

1. The Chair of Biochemistry of the Medical Institute and the  
Biochemical Laboratory of the Research Institute for Epidemiology  
and Hygiene, Khabarovsk.  
(ALDOLASE) (TRANSAMINASE)

GRITSENKO, A.N.; TROFIMOVA, L.I.; BYKOVA, Z.I.; STAROSTINA, I.S.

Use of laboratory methods in the detection of aborted and anicteric forms of epidemic hepatitis in children. *Pediatriia* 42 no.5:51-54 My'63 (MIRA 16:11)

1. Iz Khabarovskogo instituta eksperimental'noy meditsiny (direktor A.M.Krupnikova) i Lineynov sanitarno-epidemiologicheskoy stantsii Dal'nevostochnogo vodnogo otdela zdravookhraneniya (glavnnyy vrach M.S. Konstantinova)

GRITSENKO, A.N.; MAKAREVICH, N.I.; TROFIMOV, L.I.; SHMAKOTINA, Z.V.;  
STAROSTINA, I.S.

Use of laboratory diagnostic methods for the early detection of  
patients with epidemic hepatitis. Zhur. mikrobiol.; epid. i immun.  
41 no.6:47-51 Je '64. (MIRA 18:1)

1. Khabarovskiy institut epidemiologii i mikrobiologii.

NESHATAYEV, Yu.N.; STAROSTINA, K.F.

Studying the dynamics of the grass cover in various types of the "Les na Vorskla" wooded steppe oak forest. Probl. bot. 6:283-296'62.  
(MIRA 16:5)

(Vorskla Valley—Oak)

(Vorskla Valley—Forest ecology)

STAROSTINA, K.F.

Experimental data on the influence of the raspberry Rubus  
idaeus L. on the growth of the spruce Picea abies (L.)  
Karst seedlings in clear-cuttings. Bot. zhur. 50 no.7:971-  
974 Jl '65. (MIRA 18:11)

1. Laboratoriya lesovedeniya AN SSSR Moskovskoy oblasti,  
selo Uspenskoye.

STAROSTINA, K.M.

*✓* The effect of calcining bauxite upon the recovery of alumina by the autoclave method. K. M. Starostina and V. A. Parukhin. *Sbornik Nauch. Trudov Moskov. Inst. Tsvetnykh Metal. i Zolota* 1954, No. 24, 101-16; *Referat. Zhur. Met.* 1956, No. 47. — Calcination at 600-800° increases the recovery of  $Al_2O_3$  from diaspore-contg. Laxite, including hard infusible varieties. This calcination insures complete decompo. of the ore by KOH or NaOH in 2-3 hrs. Calcining of intermixed diaspore, boehmite, and laxite at  $\leq 600^{\circ}$  does not lower the extn. of  $Al_2O_3$ , because the  $\alpha Al_2O_3$  formed along with  $\gamma Al_2O_3$  has almost the same solv. as has boehmite. Adm. of lime is necessary in leaching bauxite. Calcining bauxite contg. up to 17% S in an effervescent layer at 700° for 20-30 min., removes 98% of the S. Leaching of bauxite calcined in such a manner for 2 hrs. at concn. of  $Na_2O$  (total) of 200 g./l. gave 7% higher recovery of  $Al_2O_3$  than did calcining in a muffle furnace. Eighty-eight % of the  $Al_2O_3$  from high-sulfur bauxite could be recovered by leaching by Bayer's method and preliminary calcining as the above. — Alexis N. Pestov

4

*py* *frd*  
*NT*

SHORYGINA, N.N.; IZUMRUDOVA, T.V.; EL'KHONES, N.M.; STAROSTINA, K.M.

Chlorolignin and its industrial preparation. Gidroliz. i lesokhim.  
prom. ll no.6:8-10 '58. (MIRA ll:10)

1. Institut organicheskoy khimii AN SSSR (for Shorygina, Izumrudova).
2. Gosudarstvennyy nauchno-issledovatel'skiy institut redkikh metallov  
(for El'khones, Starostina).  
(Chlorolignin)

NIKOLAEV, A.V.; STAROSTINA, L.I.; BYKOV, S.N.

Solubility of some calcium and magnesium salts in the presence  
of complexons. Izv. Sib. otd. AN SSSR no.9:52-51 '61.  
(MIRA 14:10)

1. Institut neorganicheskoy khimii Sibirskogo otdeleniya AN  
SSSR, Novosibirsk.

(Calcium salts)

(Magnesium salts)

(Acetic acid)

(Solubility)

STAROSTINA, L.P.

Differential diagnosis of obliterating endarteritis and arterio-  
sclerosis of the vessels of the extremities. Khirurgia 36  
no.3:98-106 Mr '60. (MIRA 13:12)  
(ARTERIES—DISEASES) (ARTERIOSCLEROSIS)  
(EXTREMITIES (ANATOMY)—BLOOD SUPPLY)

BRILLIANTOV, N.A.; STAROSTINA, L.S.; FEDOROV, O.P.

Production of molybdenum and tungsten single crystals in the process of crucibleless zone melting. Kristallografiia 6 no.2: 261-264 Mr-Ap '61. (MIRA 14:9)

1. Institut kristallografi AN SSSR.  
(Molybdenum crystals--Growth) (Tungsten crystals--Growth)  
(Melting)

ACCESSION NR: AP4004153

S/0294/63/001/002/0310/0312

AUTHORS: Starostina, L. S.; Kachinskiy, V. N.; Brilliantov, N. A.

TITLE: Method of growing perfect single crystals of refractory metals

SOURCE: Teplofizika vy\*okikh temperatur, v. 1, no. 2, 1963, 310-312

TOPIC TAGS: single crystal, single crystal growing, perfect single crystal, refractory metal single crystal, crucibleless vacuum zone melting, electron beam zone melting, crystal growing, zone melting, zone refining, refractory metal, crystal growth, single crystal growth

ABSTRACT: Apparatus is described for growing single crystals of refractory metals by zone melting in deep vacuum without a crucible, using a focused electron beam for heating. Multiple zone recrystallization is possible in the equipment. Single crystals of tungsten, rhenium, tantalum, niobium, molybdenum, vanadium, and zirconium were grown. The purity and perfection of the crystals was monitored by measuring the ratio of the specific resistivities at room

Card 1/3

ACCESSION NR: AP4004153

temperature and at liquid helium temperature. Single crystals grown from initial material 99.9% pure had a ratio of 10,000 for tungsten and 3,000 for molybdenum, thus refuting the assumption that transition metals cannot give a large resistance ratio because of the small electron-electron interaction at low temperatures. Measurement of the Hall effect in the very pure specimen of tungsten makes it possible to obtain some information on the Fermi surface of tungsten. Orig./art. has: 2 figures.

ASSOCIATION: Institut kristallografii AN SSSR (Crystallography Institute AN SSSR)

SUBMITTED: 11Jun63 DATE ACQ: 26Dec63 ENCL: 01

SUB CODE: PH, ML NO REF Sov: 003 OTHER: 001

Card 2/32

L 11394-63

BDS

S/120/63/000/002/033/041

45

AUTHOR: Fedorov, O. P. and Starostina, L. S.

TITLE: A power stabilizer for an electron-bombardment heater

PERIODICAL: Pribory i tekhnika eksperimenta, March-April 1963, v. 8, no. 2, 156-159.

TEXT: The article describes the power stabilizer of an electron-bombardment heater used in zone fusing to purify metals and for similar applications. Current between 1 and 100 ma is stabilized to within 1 percent and voltage is stabilized to within 4 percent. The power is constant to within 5 percent. There are five figures.

ASSOCIATION: Institut kristallografii AN SSSR (Crystallography Institute of the Academy of Sciences USSR)

SUBMITTED: June 23, 1962

ja/Ch  
Card 1/1

Starostina, L.S.

N.A. Brilliantov, V.N. Kachinskiy, L.S. Starostina. The growing of molybdenum and tungsten single crystals by zone melting and determination of the Hall effect.

Title: Seminar on refractory metals, compounds, and alloys (Kiev, April 1963).

Source: Atomnaya energiya, v. 15, no. 3, 1963, 266-267

L 16887-63

EWT(1)/EWP(q)/EWT(m)/BDS

AFFTC/ASD/ESD-3

JD/JG

ACCESSION NR: AP3005240

S/0056/63/045/002/0043/0045

AUTHOR: Volkenshteyn, N. V.; Kachinskiy, V. N.; Starostina, L. S.

67

63

TITLE: On the Fermi surface of tungstenSOURCE: Zhurn. eksper. i teoret. fiz., v. 45, no. 2, 1963, 43-45

TOPIC TAGS: tungsten, Fermi surface, galvanomagnetic property, magnetoresistance, Hall effect

ABSTRACT: The electric resistance in a transverse field, the Hall effect, and the transverse voltage on the Hall contacts were investigated in single crystals of pure tungsten at 4.2 K. The dependence of the resistance on the field direction and the quadratic variation of the resistance with the field (in all directions) were similar to those obtained by Fawcett (Phys. Rev. v. 128, 154, 1962), but the angular dependence of the Hall effect, and particularly of the even transverse voltage, exhibited strong anisotropy, with singularities in the form of rather sharp peaks. It is concluded tentatively on the basis of the results obtained that the Fermi surface of tungsten is open, and that Fawcett's conclusions concerning the absence of open trajectories in tungsten cannot be considered final.

Card 1/2

L 16887-63

ACCESSION NR: AP3005240

"The authors express their appreciation to A. I. Shal'nikov for his interest in the work and participation in its progress, and to N. A. Brilliantov for interest." Orig. art. has 1 figure.

ASSOCIATION: Institut kristallografi AN SSSR (Crystallography Inst. Acad. Sci. SSSR); Institut fiziki metallov AN SSSR (Metal Phys. Inst. Acad. Sci. SSSR)

SUBMITTED: 13Feb63

DATE ACQ: 06Sep63

ENCL: 01

SUB CODE: PH

NO REF Sov: 004

OTHER: 003

Card 2/12

ACCESSION NR: AP4034065

S/0126/64/017/004/0627/0629

AUTHORS: Volkenshteyn, N. V.; Romanov, Ye. P.; Starostina, L. S.; Startsev, V. Ye.

TITLE: Temperature dependence of the electrical conductivity of monocrystalline molybdenum

SOURCE: Fizika metallov i metallovedeniye, v. 17, no. 4, 1964, 627-629

TOPIC TAGS: molybdenum, electric conductivity, monocrystalline molybdenum, polycrystalline molybdenum, cryostat, copper molybdenum thermocouple, phonon, electron electron interaction

ABSTRACT: The authors studied the temperature dependence of monocrystalline Mo having a high degree of purity and a relative electrical resistance on the order of  $R_{300\text{ K}}/R_{4.2\text{ K}} > 3500$ , where 4.2K stands for liquid helium temperature. Test samples were obtained from a parent material of polycrystalline Mo rods 5 mm in diameter and 150 mm long, having a relative resistance of the order of 40. The approximate chemical composition was: 0.004% Fe, 0.001% Si, 0.0005% Ni, 0.0005% Mn and Al, 0.0002% Ca and Mg, 0.0001% Cu, and 0.0001% Na. Test specimens 4 mm in diameter and 25 mm long were placed in a cryostat. Temperature measurements were made with a dual copper-molybdenum thermocouple. The electrical resistance was

Cord 1/3

L 36627-65 EWT(m)/T/EWP(t)/EWP(b)/EWA(c) Pu-4 IJP(c) JD/XG  
ACCESSION NR: AP5002346 S/0126/64/018/006/0888/0894 38  
34 B

AUTHOR: Volkenshteyn, N. V.; Starostina, L. S.; Startsev, V. Ye.;  
Romanov, Ye. P.

TITLE: Investigation of the temperature dependence of the electrical conductivity  
of molybdenum and tungsten monocrystals in the low temperature regions

SOURCE: Fizika metallov i metallovedeniye, v. 18, no. 6, 1964, 888-894

TOPIC TAGS: molybdenum, tungsten, monocrystal, polycrystalline molybdenum,  
polycrystalline tungsten, electrical conductivity, Debye characteristic tempera-  
ture

ABSTRACT: The temperature dependence of the electrical resistance of high purity  
molybdenum and tungsten monocrystals and of polycrystalline samples of these  
metals was measured in the 4.2-300 K temperature range. The crystallographi-  
cally perfect monocrystals were obtained by zone melting, using electron bom-  
bardment heating. The characteristic Debye temperature was calculated for the  
temperature interval of 10-100 K. The experimental R(T) curves compared  
favorably with the theoretical Block-Gruneisen and Wilson curves. The effect of

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L 36627-65

ACCESSION NR: AP5002346

4

s--d transitions on the temperature dependence of the electrical resistance of these nonferromagnetic transition metals was discussed. "The authors thank Yu. P. Irkhin for helpful discussion and V. A. Novoselov for assistance in the measurements." Orig. art. has: 3 figures and 6 equations

ASSOCIATION: Institut kristallografii AN SSSR (Institute of Crystallography AN SSSR); Institut fiziki metallov AN SSSR (Institute of the Physics of Metals, AN SSSR)

SUBMITTED: 03Apr84

ENCL: 00

SUB CODE: MM

NR. REF SOV: 012

OTHER: 016

Card 2/2

L 5115-66 EWT(1)/T IJP(c) GG	ACC NR: AP5025340	SOURCE CODE: UR/0126/65/020/003/0474/0475
AUTHOR: Mezentseva, N. L.; Mikhaylova, N. P.; Starostina, L. S.; Dolomanov, L. A.		
ORG: Institute of Crystallography, AN SSSR (Institut Kristallografii AN SSSR)		
TITLE: Growing and refining of yttrium single crystals		
SOURCE: Fizika metallov i metallovedeniye, v. 20, no. 3, 1965, 474-475		
TOPIC TAGS: yttrium, yttrium zone refining, zone refining, yttrium single crystal, single crystal growth		
ABSTRACT: Experiments have been made to combine vacuum crucibleless zone refining of yttrium with simultaneous growing of yttrium single crystals. Yttrium ingots 80 mm long were subjected to crucibleless zone refining during which yttrium single crystals up to 1 mm long and 5 mm in diameter were successfully grown. A polymorphic transformation in yttrium at 1475°C made it impossible to obtain large single crystals. Zone refining decreased the content of iron, copper, and calcium in the ingots by 27, 20, and 10 times, respectively. The oxygen content decreased by only 2.4 times, presumably because of the formation of stable yttrium oxides, whose distribution coefficient is close to 1. For more effective refining of the growing single crystals, electric current was passed through the ingot simultaneously with the zone fusion. After 8-hr processing at a current density of 5 amp/mm <sup>2</sup> , the oxygen content in the ingot anode portion, simultaneously zone fused, was three times lower than that near the cathode portion. Orig. art. has: 1 figure. [MS]		
Card 1/2	UDC: 669.794.172	07012640

L 5115-66

ACC NR: AP5025340

SUB CODE: 88/ SUBM DATE: 200ct64/ ORIG REP: 002/ OTH REP: 001/ ATD PRESS: 4/33

EC

Card 2/2

PLATE I BOOK EXPLORATION

Sov/1916

9(2) *Vsesoyuznoye sveshchaniye po khimii bora. 1955*  
 Bori: Trudy Konferentsii po khimii bora i yego soyedineniyu (boron: Presentations of the Conference on the Chemistry of Boron and Its Compounds). Moscow, Gantvardsdat, 1958. 189 p. Errata slip inserted. 2,400 copies printed.

Ed.: G.P. Lashinitskii. Tech. Ed.: N.S. Lur'yev.

PURPOSE: This book is intended for chemists, as well as for industrial personnel working with boron and its compounds.

COVERAGE: This collection contains 26 studies on the chemistry, crystalline structure, physicochemical properties, and the technology of boron and its compounds. Twenty-two of the studies were presented at the All-Union Conference on Boron Chemistry held at the Nauchno-Issledovatel'skiy fiziko-khimicheskiy institut im. L. Ya. Marpova (Scientific Research Physicochemical Institute im. L. Ya. Marpov) in

December 1955. Two of these articles deal with the physicochemistry of boron. The two studies on boron compounds are being published for the first time. The studies are well illustrated and accompanied by bibliographies.

## TABLE OF CONTENTS:

Author: Transactions of the Conference (Cont.)	Page: Sov/1916
Stepanov, V.A. and M.I. Starostina. Thermochimical Study of Boron and of Certain Borides	97
Stepanov, V.A., and M.M. Umnatskii. Parameters of the Elementary Nuclei of Metallic Borides	102
Emel'yanov, G.A., B.M. Stepanov, and V.A. Step'yan. Borides of Transition Metals and Their Electron Massive Properties	106
Emel'yanov, G.A., V.A. Step'yan, and B.M. Stepanov. Synthesis of the Boroborides of Certain Rare Earth Metals and Their Electron Massive Properties	112
Sverdlik, N.I., B.M. Mad' [Dobrescu], and E.I. Gorbenko. Sodium Borohydride as Reducing Agent of Organic Compounds	120
Kurman, I.V. Present State and Future Prospects for Expanding the Raw Material Base of Boron	124
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Card 4/6

5(2)

SOV/78-4-8-28/43

AUTHORS: Epel'baum, V. A., Gurevich, M. A., Starostin, M. I.

TITLE: On the Solubility of Boron in Silicon (O rastvorimosti bora  
v kremnii)PERIODICAL: Zhurnal neorganicheskoy khimii, 1959, Vol 4, Nr 8, pp 1881-1884  
(USSR)

ABSTRACT: After a survey on the publication data dealing with this subject (Refs 1-14) the importance of the system mentioned in the title is pointed out since according to the publication data (Refs 5-7) the cermets which are produced from silicon and boron under the action of very high temperatures, are now industrially used. They are characterized by high strength, chemical stability, heat resistance, semiconductor properties, etc. The authors investigated the solubility of boron in silicon and its effect on the structure of the silicon crystal lattice. The composition of the samples was varied between 99Si : 1B and 1Si : 6B. The samples were melted at 1350° or 2100-2200°C in argon atmosphere and analysed by X-ray methods (X-ray camera RKU-86 and RKU-114, copper radiation  $\lambda_{CuK\alpha_1} = 1.537396$  kX). The lattice period of silicon decreasing with

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SOV/78-4-8-28/43

On the Solubility of Boron in Silicon

increasing boron content is shown by table 1 and graphically represented by using the data by F. Horn (Ref 14) and H. Nowotny (Ref 15) in figure 1. The behaviour of the solution of boron in silicon corresponds to the solid substitution solution. The strong contraction of the silicon lattice under the influence of relatively small boron amounts could not be explained. There are 1 figure, 1 table, and 17 references, 5 of which are Soviet.

SUBMITTED: April 26, 1958

Card 2/2

GRYUMER, V.S., professor; STAROSTINA, N.A., kandidat khimicheskikh nauk  
REZNIKOVA, S.B., nauchnyy sotrudnik; APANAS'YEVA, N.V., nauchnyy  
sotrudnik; OSMOLOVSKAYA, V.A.; NIKIFOROVA, G.V.; BUDORAGIN, M.G.,  
proizv.instr. LYUBIMOV, P.V.

Testing the technical qualities of berry varieties for confection-  
ary products. Trudy VNIII no.10:84-105 '54. (MLRA 8:9)  
(Berries)

STAROSLINA, N.V.

Automatic operation of the switching stations of double-track insertions in single-track line bypasses. Avtom. telem. i sviazi 8 no. 5-4-8 My '64. (MERA 17:10)

1. Glavnnyy inzh. proyektov Gosudarstvennogo proyektirovaniya signalizatsii, izyskatei'skogo Instituta po proyektirovaniyu signalizatsii, tsentralizatsii, svyazi i radio na zhelezodorozhnom transporte.

25 11/14/86 11:47 11/14/86 11:47  
MARUSHKO, F.I.; STAROSTINA, N.V.; PENKIN, N.T., kandidat tekhnicheskikh  
nauk, redaktor; SADOV, T.Ya., inzhener, redaktor; VERINA, G.P.,  
tekhnicheskiy redaktor.

[Central dispatching systems] Dispatcherkaiia tsentralizatsiia.  
Moskva, Gos. transp. zhel-dor. izd-vo, 1953. 254 p. [Microfilm]  
(Railroads--Train dispatching) (MIRA 7:11)

MIKHAYLOV, I. G., KOSHKIN, N. I., LUTOVININ, V. S., NOZDREV, V. F. and STAROSTINA, O. A.

"Absorption of Sound in Acetates."

report presented at the 6th Sci. Conference on the Application of Ultrasound  
in the investigation of Matter, 3-7 Feb 1958, organized by Min. of Education  
RSFSR and Moscow Oblast Pedagogic Inst. im. N. K. Krupskaya.

## STAROSIWA, O. A.

24(1) PHASE I BOOK EXPLOITATION SOV/3150

Vserossiyskaya konferentsiya professorov i pedopodavately pedago-gicheskikh institutov

Prilozheniya ul'traakustiki k ismledovaniyu veshchestva: trudy kon-ferentsii. Vyp. 7. (Application of Ultrasonics for Analysis of Substances). Transactions of the All-Russian Conference of Pro-fessors and Teachers of Pedagogical Institutes, Mr. 7) Moscow, Izd. NPF, 1958. 283 p. 1,500 copies printed.

Tech. Eds.: S. P. Zhitov; Eds.: V. P. Mordovskiy, And-riy N. Kudryavtsev.

PURPOSE: This book is intended for physicists, technicians, aero-nautical engineers and other persons concerned with ultrasonics.

**COVERAGE:** The book contains twenty-eight articles which treat ultrasonic phenomena in five general categories: 1) historical data on the development of ultrasonics in the Soviet Union over the past forty years; 2) the speed of sound in suspensions of varying concentrations and number and type of components and their relationships between sound velocity and the compressibility of each polymer; 3) ultrasonic investigations of physical and chemical properties of materials and the determination of physical and chemical constants, e.g., density of aqueous solutions, adiabatic compressibility, molarity, molarity of solutions (with given temperatures), viscosity, surface tension, saturation pressure and also ultrasonic investigation of the carbon content and petrographic state of coal; industrial applications of ultrasonics. An application of ultrasonic resonance cleaning of textile fibers and enhancing the acceptability of some synthetic fibers to dyeing, etc.; and 5) apparatus which produce ultrasonic waves. No personalities are mentioned. Each article is approximately one page in length.

Zagorskiy, N. Application of Ultrasonic Methods for Measure-ment of the Depth of a Tempered Surface Layer 169

Yakubov, V. S. and A. D. Ziper. Elementary Theory of a Quartz Converter 185

Kalininov, B. I. Measurement of the Coefficient of Absorp-tion of Ultrasound in the Critical Range of Methyl Acetate by the Pulse Method 201

Kalininov, B. I. Methodological Peculiarities of Investi-gating the Coefficient of Absorption of Substances in the Critical Range by the Pulse Method 207

Slobod, V. D. The Application of a Telescopic System for Measurement of the Speed of Ultrasound by the Optical Method 217

Borsova, Yu. N. and O. I. Starostina. A New Design for the Measuring Chamber of a Photoelectric Apparatus 221

Mukatov, Ya. S. and A. I. Ivanov. A Demonstrator Pulse Generator With Ultrasonic Indicator 225

Molniruk, A. S. Some Academic Experiments With the Application of Electroacoustic Apparatus 229

Kudryavtsev, B. R. The Propagation of Sound in Liquids 257

Belinsky, B. A. The Theory of Speed Dispersion and the Coefficient of Absorption of Ultrasound in Esters of Organic Acids 269

Akulov, M. S. The Theory of Phase Transitions With Two Curie Points 279

Card 6/7

S/194/61/000/008/053/v92  
D201/D304

AUTHOR: Starostina, O.A.

TITLE: The optical method of measuring ultrasound absorption in ethyl-acetate and propyl-acetate

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika, no. 8, 1961, 7, abstract 8 E53 (Uch. zap. Mosk. obl. ped. in-ta, 1960, 92, 199-210)

TEXT: The usual arrangement of diffraction method was used. A description is given of the block diagram and the optical section of the arrangement for observing light diffraction at US. The arrangement employs the ФЭУ-19 (FEU-19) multi-stage photomultiplier, the diffraction spectrum being focussed at its cathode by a lens. The visual observation and control of the slot size were made possible by a special photo-micro attachment between the photomultiplier and the lens. The light beam was controlled by a small unit containing a photo-element and a micro-ammeter. The analyzed

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The optical method...

S/194/61/000/008/053/092  
D201/D304

fluid was poured into a glass cuvette with double walls with the temperature stabilizing fluid between them; the cuvette was placed in a Dewar's vessel. The absorption of ultrasound was measured by the intensity of spectra of the  $\pm$  1st order at two different distances from the quartz. A standard signal generator was used so that quick-tuning and frequency stability could be attained; the generator voltage was amplified by a single stage resonance amplifier with a pentode 6M9 (6P9). The frequency was measured either from the Vernier reading or by a wavemeter. The generator and amplifier supplies were mains stabilized. The voltage applied to the quartz was controlled by a cathode voltmeter BKC -7 (VKS-7), connected in parallel to the quartz at the output of the amplifier. 2 series of measurements of ultrasound absorption in propyl-acetate (P) were made. In the first of the series, measurements were carried out at 11 frequencies (from  $\sim$  7 to  $\sim$  25 mc/s) in the interval -30 to +50°C. In the second they were carried out at 3 isotherms: -10, 0 and 20°C in the range 6-25 mc/s. The parameters of P are ✓

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24 1800

30505  
S/194/61/000/008/055/092  
D201/D304

AUTHOR: Starostina, O.A.

TITLE: Ultrasound absorption by esters of acetic acid

PERIODICAL: Referativnyy zhurnal. Avtomatika i radioelektronika,  
no. 8, 1961, 9, abstract 8 E64 (Uch. zap. Mosk. obl.  
ped. in-ta, 1960, 92, 211-222)

TEXT: The absorption of ultrasound in propyl acetates has been investigated at temperatures from -30 to +50°C at frequencies from 5 to 26 mc/s. The experimental results obtained cannot be explained by either the classical theory of absorption of Stokes-Kirchhoff or by relaxation. Because of this, assessment of experimental data is being made on the basis of quantum mechanics analysis of B.A. Belinskiy (Dissertation, MOPI im. Krupskoy, 1959), who has found a more accurate solution of the relaxation equation than that given by Kneser (Ann. der Phys. 1935, 21, 682). The experimental results of study of absorption in two samples of propyl-acetate at

Card 1/2

4

Ultrasound absorption...

<sup>30505</sup>  
S/194/61/000/008/055/092  
D201/D304

+20° and -10°C are in good agreement with the more exact theory of relaxation. The velocity dispersion and thermal capacity of the internal degrees of freedom have been evaluated as 0.25% and 1.6 cal/mol. degree respectively. Graphs are given which represent the results of similar analysis of ethyl acetate. 11 figures. 10 references. Abstracter's note: Complete translation

Card 2/2

X

STAROSTINA, R.F.

Levin, L. M. and Starostina, R. F. Nekotorye rezul'taty issledovaniia strukturny oblakov.  
[Some results of the investigation of the structure of clouds.] *Akademia Nauk SSSR, Doklady*, Moscow, 93(2):253-256, Nov. 11, 1953. 2 figs., 5 refs., 7 eqs. DLC—Some results of a complex investigation of the microstructure of clouds by means of collecting cloud drops with the aid of a cloud drop "trap" carried out during June-Nov. 1951 as part of the Elbrus high-mountain expedition of the Geophysical Institute of U.S.S.R. are presented and discussed. They concern: the number of drops with diameter exceeding  $4\mu$  which varied (depending on the types of the clouds) from less than 100 to 1000 in  $m^3$ ; the size of the drops; their average cubic diameter, etc. *Subject Headings:* 1. Cloud structure 2. Cloud droplets 3. Drop size data.—A.M.P.

RC

STAROSTINA, R.F.; CHUDAYKIN, A.V.

Cloud droplet traps used in the Elbrus Expedition. Trudy  
Vysokogor. geofiz. inst. AN SSSR 2:72-78 '61. (MIRA 14:12)  
(Cloud physics)  
(Meteorological instruments)

STAROSTINA, T. A.

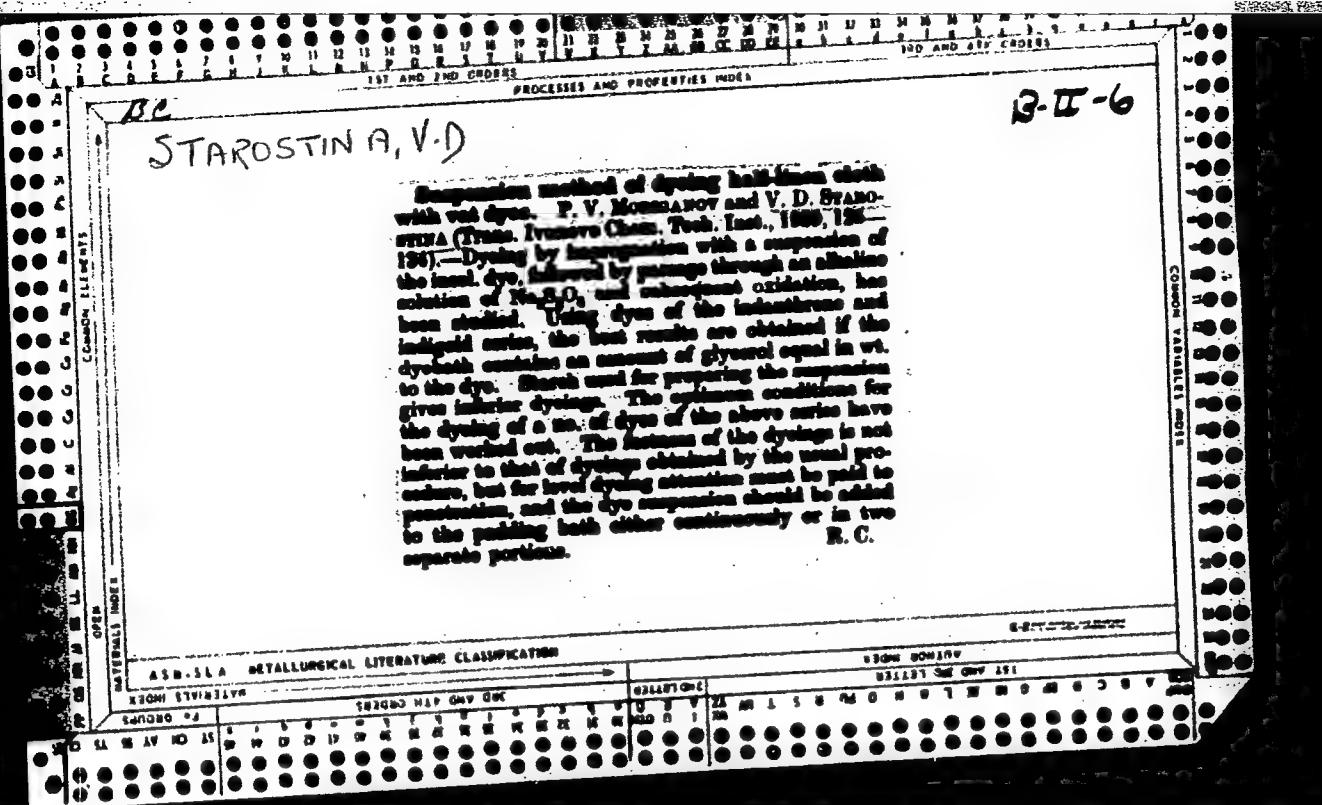
10

Preparation of triglycerides of hydroxy acids. G. V. Pigulevskii and T. A. Starostina (A. Zhdanov State Univ., Leningrad). *Doklady Akad. Nauk S.S.R.* **79**, 201-2 (1961); cf. *C.A.* **54**, 3781. Treatment of 100 g. peach oil in 200 ml.  $\text{Et}_2\text{O}$  with 65 ml.  $\text{AcO}_2\text{H}$  in  $\text{Et}_2\text{O}$  gave after 16 days 87 g. product, m. 44-5°, which on hydrogenation over  $\text{Pd}$  gave 3-palmito-1,2-stearin or the isomeric 2-palmito-1,3-stearin, m. 62.4° (from  $\text{EtOH}$ ). Sapon. with alc.  $\text{NaOH}$  gave palmitic acid, m. 62°, and  $\alpha$ -hydroxystearic acid, m. 82°, in 1:2 ratio. Hence, peach oil contained palmitostearin. G. M. Kosolapoff

STAROSTINA, T.A.

Gynecological operations in elderly and senile women. Akush.  
i gin. no.2:38-44'63. (MIRA 16:10)

1. Iz ginekologicheskoy kliniki na baze 61-y Klinicheskoy  
bcl'nitsy (glavnnyy vrach - kand.med.nauk L.N. Vasil'evskaya)  
i kafedry akusherstva i ginekologii (zav. - zasluzhennyy de-  
yatel' nauki prof. K.N. Zhmakin) I Moskovskogo ordena Lenina  
meditsinskogo instituta imeni I.M.Sechenova. Nauchnyy ruko-  
voditel' raboty prof. V.I.Bodyazhina.  
(GYNECOLOGY, OPERATIVE) (GERIATRICS)



STAROSTINA, V.D.; YATSIMIRSKIY, K.B.

Spectrophotometric analysis of the interaction of acid chrome blue K with copper, zinc and cadmium ions in solutions. Izv.vys.ucheb. zav.; khim. i khim.tekh. 8 no.2:343-345 '65.

(MIRA 18:8)

1. Ivanovskiy khimiko-tehnologicheskiy institut, kafedra neorganicheskoy khimii i kafedra analiticheskoy khimii.

STAROSTINA, V.D.; YATSIMIRSKIY, K.B.

Spectrophotometric studies of compounds of acid chrome blue K with nickel and cobalt ions. Izv.vys.ucheb.zav; khim.i khim. tekhn. 4 no.5:710-714 '61. (MIRA 14:11)

1. Ivanovskiy khimiko-tehnologicheskiy institut, kafedra neorganicheskoy i analiticheskoy khimii.  
(Azo compounds—Spectra)

FEODOT'YEV, K.N.; STAROSTINA, V.O.

Natural and artificial ferroaluminosiliceous hydrates. (In: Akademija nauk SSSR, Voprosy petrografii i mineralogii. Moskva, 1953.  
Vol. 2, p.220-227) (MLRA 7:4)  
(Silicates)

Starostina, V.G.

Ref

Natural and synthetic iron aluminum silicate hydrates. K. M. Fedot'ev and V. G. Starostina. *Voprosy Petrol. i Mineral., Akad. Nauk S.S.R.* 2, 22-27 (1953).—Described are the contacts of carbonaceous lime-stones and Jurassic clay sediments of the Moscow Basin which show as decompos. products of pyrite nodules abundant jarosite, chalcocite (hyalite), and Al and Fe oxide hydrogels, associated with allophane and which an Fe halloysite and ferrallophane are characteristic. The differential-thermal curves of Fe allophane show dehydration at 100-190°, and a weak exothermic effect at 350° which corresponds to the reaction  $\gamma \rightarrow \alpha \text{Fe}_2\text{O}_3$ . Weak exothermic effects are observed at 825° and 975° (indicating the mullitization). On the differential-thermal curve of Fe halloysite the 2 endothermic effects are identical with those of common halloysite; the exothermic effects at 320° ( $\gamma \rightarrow \alpha \text{Fe}_2\text{O}_3$ ), 810-930° (strong) and 1140-1150° are observed in Fe halloysite from the Vishnev Mts. and Kazakhstan. Fe halloysite is tubular in the electron-microscopic image; ordinary halloysite is bath-shaped. Synthetic expts. for the production of Fe Al

silicate hydrates are successful only at low temps., by a reaction of an alk. silicate soln. with an acidic  $\text{AlCl}_3 + \text{FeCl}_3$  soln. in equivalent ratios  $\text{R}_1\text{O}_3: \text{SiO}_4 = 1.2-3$ , and  $\text{Al}_2\text{O}_3: \text{Fe}_2\text{O}_3 = 0.10-1.07$ . The differential-thermal curves of the ppts. are nearly identical with those of Fe allophane and Fe halloysites of low  $\text{Fe}_2\text{O}_3$  contents, with their characteristic endo- and exothermic effects. Autoclaved samples (at 150 and 240°) show the crystn. of  $\text{Fe}_2\text{O}_3$  hydrates. The evidently high stability of  $\gamma\text{-Fe}_2\text{O}_3$  even under autoclave conditions (240°) is somewhat surprising; one may conclude that lepidocrocites are hydrothermal-secondary products in nature. Only at low temps. are the complex Fe-Al silicate hydrates stable; a slight increase in temp. is sufficient to separate  $\text{Fe}_2\text{O}_3$ . The products low in  $\text{Fe}_2\text{O}_3$  show exothermic effects at 900° and 1100°; the higher the  $\text{Fe}_2\text{O}_3$  content the more pronounced in the autoclaved products are exothermic effects at 770°, and 1130-1180°, and even higher for  $\text{Fe}_2\text{O}_3$ -rich compns. (crystn. of cristobalite). W. Eitel

IVANCHIKOVA, Ye.I.; STAROSTINA, V.N.

Doubling capron thread with cotton on automatic circular hosiery  
knitting machines. Obm.tekh.opyt. [MLP] no.36:16-17 '57.  
(Knitting, Machine) (Hosiery) (MIRA 11:11)

I 23474-66 ENT(m)

ACC NR: AP6013980

SOURCE CODE: UR/0228/65/000/002/0017/0019

AUTHOR: Shteyn, Ya. Sh. (Candidate of technical sciences); Yakub, I. A. (Candidate of technical sciences); Starostina, V. P. (Engineer)

ORG: none

14  
B

TITLE: Porous clay aggregate for high-strength concrete

SOURCE: Stroitel'nyye materialy, no. 2, 1965, 17-19

TOPIC TAGS: concrete, clay

ABSTRACT: Not all heat-expanded clay aggregates are suitable for high-strength concrete, and this paper reports on studies made to determine the better kinds. Both laboratory and regular industrial concrete samples were tested. Samples of concrete with expanded filler were prepared for strength testing. The aggregates were graded by specific weight and strength. In all cases the grains were similar in shape and surface characteristics and the intergranular space was about 47%. Samples were also made with crushed aggregates of various strengths and specific weights. Strength as a function of cement content was also tested, and results are shown by ternary diagrams (nomograms).

Concrete mixtures contained the following fractions by volume: 15% 12 mm, 20% 1.2 to 5 mm, 27% 5 to 10 mm, 38% 10 to 20 mm. Samples were cured in steam ovens. Strength details of samples containing various proportions of Portland cement and aggregates of various strengths are compared in tables and graphs and are discussed extensively. Certain expanded aggregates are shown

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L 23474-66

ACC NR: AP6013980

to permit savings of up to 30% to 50% cement for given strengths as compared to ordinary heavy concrete. [JPRS]

SUB CODE: 13 / SUBM DATE: none

Card 2/2

SHTEYN, Ya.Sh., kand.tekhn.nauk; STAROSTINA, V.P., inzh.

Properties of agloporites and concretes made with them. Sbor.  
trud.VNIINSM no.6:181-187 '62. (MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut novykh  
stroitel'nykh materialov Akademii stroitel'stva i arkhitektury  
SSSR.

(Aggregates (Building materials))  
(Lightweight concrete)

БАЧУН, Ф. А., канд. техн. науки; ТАКОВ, Л. А., канд. техн. науки;  
РОСТИНА, В. П., инж.

Karamzit gravel for high-strength concrete. Stroi. mat. li  
no. 1817-69 5 '65. (MIRA 1813)

STAROSTINA, Ye.I., inzhener.

Constructing a roadbed with graders. Stroi. dor. 10 no.7:10-12  
Jl-Ag '47. (MLRA 6:12)  
(Road construction)

8/01/61/000/021/058/094  
B138/B101

## AUTHORS:

Morina, I. N., Vinogradova, N. P., Listopadov, M. V.,  
Starostina, Ye. S.

## TITLE:

Combined synthesis of acetylene and ethylene by hydro-carbon pyrolysis

## PERIODICAL:

Referativnyy zhurnal. Khimiya, no. 21, 1961, 317, abstract  
21L11 (Sb. "Sintez monomerov dlya proiz.-va sintetich.  
kauchuka". L., Goskhimizdat, 1960, 197 - 206)

TEXT:  $C_2H_2$  and  $C_2H_4$  are simultaneously produced, in quantities of up to 50 % by weight of the starting hydrocarbons, by the pyrolysis of propane and butane (temperature  $\geq 1050 - 1100^\circ C$ , contact time 0.1 - 0.15 sec.). Depending on conditions of production, the  $C_2H_2/C_2H_4$  ratio varies between 1 : 3 and 3 : 1. For commercial production it is suggested that tubular furnaces should be used. They should be made of the refractory alloy No. 2, have tube diameter 50 mm and length 23 m, and allow for the rare action

Card 1/2

*STAROSTINA, YE.S.*

S/081/61/000/020/070/089  
B126/B147

AUTHORS: Morina, I. N., Vinogradova, N. P., Davydov, A. N.,  
Kornilova, N. S., Konetspol'skiy, L. I., Listopadov, M. V.,  
Starostina, Ye. S., Chernysheva, R. K., Shainskiy, Ya. B.

TITLE: Separation of acetylene from pyrolysis gases, using  
dimethyl formamide as absorbent

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1961, 317, abstract  
2019 (Sb. "Sintez monomerov dlya proiz-va sintetich.  
kauchuka". L., Goskhimizdat, 1960, 207-215)

TEXT: A scheme for separating concentrated  $C_2H_2$  from gases produced by  
high-temperature pyrolysis of hydrocarbons, using dimethyl formamide as  
absorbent, was developed and checked on a test unit. The optimum  
conditions for the process were established which ensure a virtually  
complete extraction of  $C_2H_2$  from pyrolysis gases and a yield of concentrate  
containing 98 to 99 % by volume of  $C_2H_2$ . [Abstracter's note: Complete  
translation.]

Card 1/1

STAROSTINA, Z. D.

"A Comparative Evaluation of the Effectiveness of Some Depot Penicillin Preparations in the Treatment of Gonorrhea in Men." Cand Med Sci, Gor'kiy State Medical Inst, Gor'kiy, 1954. (RZhBiol, No 6, Nov 54)

Survey of Scientific and Technical Dissertations Defended at USSR Higher Educational Institutions (11)

SO: Sum. No. 521, 2 Jun 55.

ARTEM'YEV, S.A.; NYUNIKOVA, O.I.; ZHAROV, A.V.; METAL'NIKOV, B.P.; KISLOVA, T.A.; STAROSTINA, Z.D.; CHASTIKOVA, A.V.; TEMYANKO, S.A.; IKONNIKOV, N.N.; ARALOVA, Z.T.; GRISHINA, A.M.

Levomycetin in the treatment of gonorrhea; results of a cooperative study. Vest. derm. i ven. 33 no.2:70-73 Mr-Ap '59. (MIRA 12:7)

1. Iz Tsentral'nogo nauchno-issledovatel'skogo kozhno-venerologicheskogo instituta (zav. otdelom gonorei - prof. I.M. Porudominskiy, dir. - kand. med. nauk N.M. Turanov) Ministerstva zdravookhraneniya RSFSR.
2. Tsentral'nyy nauchno-issledovatel'skiy kozhno-venerologicheskiy institut (for Nyunkova).
3. Bashkirskiy krayevoy kozhno-venerologicheskiy institut (for Zharov).
4. Gor'kovskiy krayevoy kozhno-venerologicheskiy institut (for Temyanko).
5. Sverdlovskiy krayevoy kozhno-venerologicheskiy institut (for Grishina).  
(CHLORAMPHENICOL, ther. use,  
gonorrhea (Rus))  
(GONORRHEA, ther.  
chloramphenicol (Rus))

DRUBLYANETS, E.E., kand. biol. nauk; TKACHENKO, N.I., kand. biol. nauk; STAROSTINA, Z.I., nauchn. red.; SHENDAREVA, L.V., tekhn. red.

[Improvement of the biological system of purification of the waste waters of hydrolysis plants] Sovershenstvovanie rezhima biologicheskoi ochistki stochnykh vod gidroliznykh zavodov. Moskva, TSentr. in-t tekhn. informatsii i ekon. issledovanii po lesnoi, bumazhnoi i derevoobrabatyvaiushchei promyshl., 1963. 35 p. (MIRA 17:4)

KOROTCHENKO, N.I., kand. vet. nauk; STAROSTINA, Z.I., nzuhn. red.;  
MILIKESOVA, I.F., tekhn. red.

[Vitamin content of feed yeasts and methods for its  
determination] Soderzhanie i metody opredeleniia vita-  
minov v kormovykh drozhzhakh. Moskva, TSentr. in-t tekhn.  
informatsii i ekon. issl. po lesnoi, bumazhnoi i derevo-  
obrabatyvaiushchei promyshl., 1963. 39 p.

(MIRA 16:9)

(Yeast--Analysis) (Vitamins)

POLIVANNYY, V.I., red.; STAROSTINA, Z.I., red.; DAVYDOVA, M.I.,  
red.; PETRENKO, V.M., tekhn. red.

[Intensifying the production processes at hydrolytic and  
wood chemistry enterprises] Intensifikatsiia proizvodstven-  
nykh protsessov na gidroliznykh i lesokhimicheskikh pred-  
priatiiakh. Moskva, 1963. 45 p. (MIRA 16:11)

1. TSentral'nyy institut tekhnicheskoy informatsii i eko-  
nomicheskikh issledovaniy po lesnoy, bumazhnoy i derevo-  
obrabatyvayushchey promyshlennosti.

(Woodpulp industry) (Hydrolysis)

ACCESSION NR: AT4010740

S/2839/63/000/002/0017/0024

AUTHOR: Edel'man, N. M. (Engineer); Starostina, Z. I. (Engineer)

TITLE: The new deformable aluminum alloy AD35

SOURCE: ASIA SSSR. Institut stroitel'ny\*kh konstruktsiy. Stroitel'ny\*ye konstruktsii iz alyuminiyev\*kh splavov, no. 2, 1963, 17-24

TOPIC TAGS: aluminum alloy, heat treatable aluminum alloy, alloy AD35, corrosion resistant aluminum alloy, weldable aluminum alloy, construction aluminum alloy, aluminum, aluminum magnesium silicon alloy

ABSTRACT: The article describes experimental alloy AD35, 4th in the Al-Mg-Si series, which is currently undergoing production tests in the SSSR. The other three (AD31, AD33 and AV) are currently used in the manufacture of numerous types of semifinished products. The chemical composition of AD35 includes 0.8 — 1.4% Mg, 0.8 — 1.2% Si, and 0.5 — 0.9% Mn. It has good corrosion resistance, machinability, enameling and polishing characteristics, welds easily and is free of deficit Cu. The alloy is recommended for wide use in constructions requiring medium strength and good corrosion resistance. Use of the material is not recommended for temperatures above 170C. Several tables illustrate the mechanical properties (longitudinal and transverse) for sheets, rods, angles, bars, as well as the effect

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ACCESSION NR: AT4010740

of heat, corrosion and tempering-aging interval on such properties. The specific gravity of the alloy is 2.72, the linear expansion coefficient ranges from  $23.6 \cdot 10^{-6}$  at 20 – 100°C to  $29.7 \cdot 10^{-6}$  at 300–400°C, the thermal conductivity is 0.41 – 0.44 cal/cm sec. degrees at 100 – 400°C, the specific resistance is 0.0329 ohm mm<sup>2</sup>/m. "Ye. A. Gubareva took part in studying the properties of alloy AD35. The corrosion resistance of semifinished products made of alloy AD35 was studied by Ye. I. Burova and L. I. Agapova. The profiles of PS754-5 were studied by Ye. I. Kutaytseva and S. M. Ambartsumyan. Semifinished products of alloy AD35 were welded by Yu. P. Arbuzov." Orig. art. has: 7 tables.

ASSOCIATION: Institut stroitel'nykh konstruktsiy, ASIA SSSR (Institute for structural Components, ASIA SSSR)

SUBMITTED: 00

DATE ACQ: 17Jan64

ENCL: 00

SUB CODE: MA, ML

NO REF SOV: 000

OTHER: 000

2/2

Card

ACCESSION NR: AT4037643

S/2981/64/000/003/0005/0026

AUTHOR: Edel'man, N. M.; Fridlyander, I. N.; Starostina, Z. I.

TITLE: A study of the properties of alloys in the Al-Mg-Si system

SOURCE: Alyuminnye splavy\*, no. 3, 1964. Deformiruyemye splavy\* (Malleable alloys), 5-26

TOPIC TAGS: aluminum alloy, aluminum magnesium silicon alloy, alloy AV, alloy AD31, alloy AD33, alloy AD35, alloy mechanical property, alloy chemical composition, alloy corrosion resistance, alloy weldability, alloy heat treatment, alloy stampability, silicon containing alloy, magnesium containing alloy

ABSTRACT: Tests were carried out on sheet samples (1.5 mm thick) of 87 alloy compositions to determine the effects of alloy composition and heat treatment conditions on mechanical properties, the effects of composition on corrosion resistance, and the weldability. Content of Mg varied by 0.2% from 0 to 2.0%, Si by 0.2 or 0.4% from 0.0 or 0.2% to 2.0% for each Mg content. The samples were annealed (1 hr. at 370C, cooled in a furnace to 150C, then in free air) or hardened (530C, niter bath) and tested either prior to aging, after 15 days of natural aging or after 12 hrs. of artificial aging at 160C. Machine welding operations were in a argon atmosphere, using a nonconsumable electrode and welding rods of the basic.

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ACCESSION NR: AT4037643

material. Analysis of concentration triangles plotted for the system indicates that peak strength for all hardening procedures used applies to alloys in the triphasic area  $\alpha$  +  $Mg_2Si$  + Si at  $Mg + Si = 2.5$  to 4% total. The alloys exhibited good plasticity after annealing, as well as after hardening with artificial aging or prior to aging. Stamping, cupping, flanging and extrusion are possible at high levels of deformation. Corrosion resistance to immersion in 3% NaCl with 0.1%  $H_2O_2$  added decreased with an increase in Si and the  $Mg_2Si$  phase, was relatively unaffected by an increase in Mg, and deteriorated sharply in the direction from excess Mg to excess Si where  $Mg_2Si$  was constant. Weldability was adequate for argon arc roll or spot welding, tensile strength of seams was 60-70% of initial material levels and was restored to 90-95% by subsequent heat treatment. Tendency to crystallization cracking was high when using welding rods of original material (cracking coefficient 60-80%), but use of SVAK5 rods (5% Si, balance Al) reduced that value to 0-20%. Use of such rods did not affect strength, plasticity or corrosion resistance. Alloys in this system are recommended for applications requiring high corrosion resistance, high yield points (compared to magnesium), good weldability and a decorative appearance in riveted or cemented constructions,

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ACCESSION NR: AT4037643

as well as welded structures where lowered strength of weld joints can be tolerated. Three alloys (AD31, AD33 and AD35, composition and mechanical properties given) were submitted for industrial use as a result of this study. "Ye. A. Gubareva, Ye. I. Burova, L. A. Agapova, Yu. P. Arbuzov and R. N. Naumova also took part in the work." Orig. art. X has: 3 tables and 16 graphs.

ASSOCIATION: none

SUBMITTED: 00

DATE ACQ: 04Jun64

ENCL: 00

SUB CODE: MM

NO REF SOV: 008

OTHER: 002

Card 3/3

ARBUZOV, Yu.P.; Prinimali uchastiye: FRIDLYANDER, I.N.; EDEL'MAN, N.M.;  
BUROVA, Ye.I.; SOLOV'YEVA, V.V.; STAROSTINA, Z.I.; GUBAREVA, Ye.A.

Properties of welded joints in AD31 and AD33 aluminum alloys.  
Alium. splavy no.3:36-45 '64. (MIRA 17:6)

L 37160-66 EWT(m)/EWP(w)/EWP(v)/T/EWP(t)/ETI/EWP(k) IJP(c) JH/JD/HM/WB/GD/HW

ACC NR: AT6016415 (N) SOURCE CODE: UR/0000/65/000/000/0093/0101

AUTHORS: Edel'man, N. M.; Starostina, Z. I.

ORG: none

TITLE: Deformable aluminum alloy AD35

SOURCE: AN SSSR. Institut metallurgii, Metallovedeniye legkikh splavov (Metallography of light alloys). Moscow, Izd-vo Nauka, 1965, 93-101

TOPIC TAGS: aluminum alloy, silicon, manganese, magnesium / AD35 aluminum alloy

ABSTRACT: The mechanical properties, welding behavior, and corrosion stability of the alloy AD35 (0.8-1.4% Mg, 0.8-1.2% Si, and 0.5-0.9% Mn) were investigated. This investigation supplements the results of an earlier study by N. M. Edel'man, I. N. Fridlyander, and Z. I. Starostina (Issledovaniye svyostv splavov sistemy Al-Mg-Si-Sb. Alyuminiyevyye splavy, vyp. 3, Izd-vo Mashinostroyeniye, 1964). The experimental results are tabulated. Photographs of the macrostructure of several forged objects manufactured from alloy AD35 are presented. It is concluded that alloy AD35 is a suitable material for applications requiring moderate mechanical strength and increased corrosion stability as compared with alloy AV. Ye. A. Novikova and T. I. Ivanova participated in the determination of the mechanical properties of the alloy AD35. Welding of AD35 semifinished products was carried out

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